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REPORT

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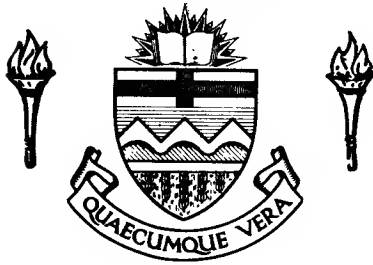
LOCAL BOARD OF HEALTH



CITY OF EDMONTON
ALBERTA

1936

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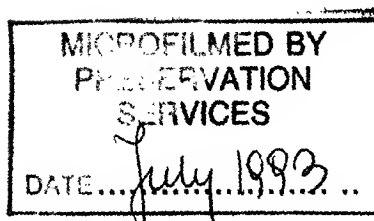
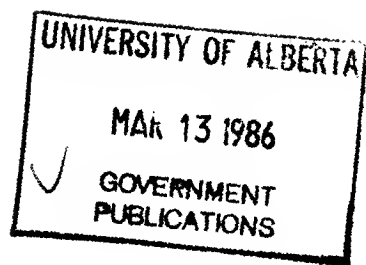
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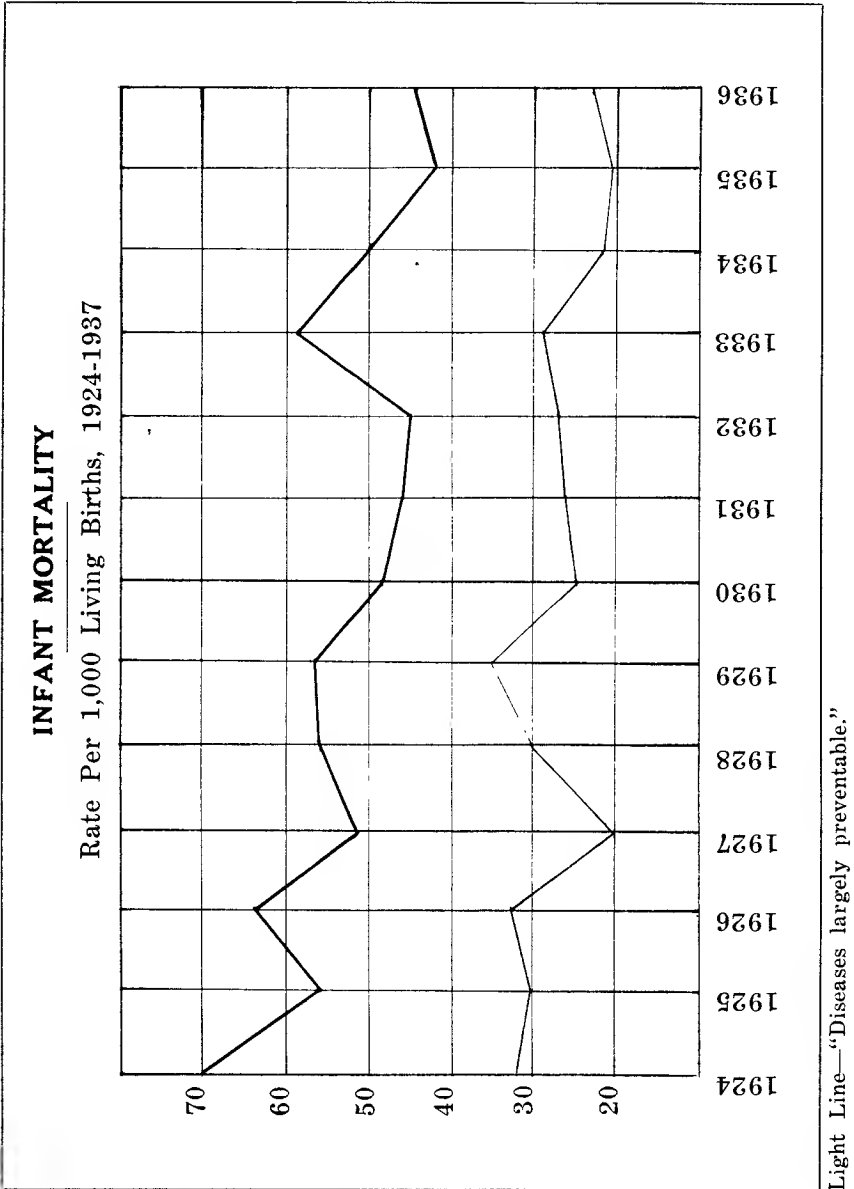
Mayor Joseph A. Clarke
Dr. R. B. Jenkins, M.O.H. A. W. Haddow, City Engineer
S. Main, Secretary.

STAFF:

Medical Officer of Health R. B. Jenkins, M.D., D.P.H.
Secretary S. Main, A.R. San. I.
Chief Health Inspector W. R. Graham, R. San. I. (Cert.)
Health Inspector J. H. Blackburn, A. R. San. I.
Health Inspector T. E. Lord
Health Inspector A. P. Methuen, A.R. San. I.
Health Inspector J. D. Williams
Quarantine Officer R. T. Anderson, A.R. San. I.
Chief Food Inspector J. H. Part, V.S., M.D.V.
Meat Inspector D. Morrison, V.S.
Dairy Supervisor C. Ellinger, M.R. San. I.
Analyst H. C. Graham, B.A.
Statistician Miss B. B. Murray
Chief Public Health Nurse Miss M. Griffith, R.N.
Public Health Nurse Miss S. C. Christensen, R.N.
Nurse-Stenographer Miss H. I. Chisholm, R.N.
Filing Clerk Miss C. Rose
Stenographer Miss Dorothy Derbyshire

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Annual Report of Medical Officer of Health

Chairman and Members of the
Local Board of Health.

Gentlemen:

Herewith are submitted reports from the various services conducted by this Board during the years 1935 and 1936. It also includes some figures on work conducted by other health agencies, voluntary and official.

As you will see from the summary of statistics there was a small increase in the general death rate, it being 8.16 per thousand, whereas the previous high figure in the last five years was in 1932 when the rate was 7.91. The increase appears in most of the principal causes of death, diseases of the heart show a considerable increase; cancer, a slight increase; external causes, increased, as were influenza, nephritis and apoplexy. Principal causes which showed a reduction were tuberculosis, appendicitis and malformations. The birth rate is slightly reduced and the infant mortality rate is somewhat larger than the previous year, but is comparatively satisfactory.

In the communicable diseases there was a very considerable increase in the incidence, the morbidity rate per thousand being 118.6, compared with 65.6 for 1935. Most of this increase was made up during an epidemic of rubella which gave us 5,384 cases and there were also 1,243 cases of whooping cough and 362 cases of scarlet fever. The continued low incidence of diphtheria shows the tremendous benefit of toxoid treatment. I would call your attention to the section of the report showing the number of immunizations carried out by this Board and the School Boards. In all there were about 29,000 separate treatments administered in 1936. As you will recall, the anti-scarlet fever treatment was begun after a consultation with your Board because of the threat of an epidemic. The Kinsmen's Club continues to give an exceedingly valuable service in the visits made to tuberculosis patients, arrangements for supervision of these patients and examination of contacts. During the year 1936 a small outbreak of typhoid fever occurred, which from an epidemiological standpoint was traceable to cheese. This cheese had been manufactured in a district where typhoid was prevalent and the product was eaten within a few days of its production. From the study that I made at the time it would appear that if cheese is aged for sixty days or more the typhoid organism will be destroyed during that process, but if this aging process is not carried on, the only safeguard we would have would be the pasteurization of milk prior to its being made into cheese.

As pointed out by the senior nurse they are somewhat concerned about the declining attendance at the child welfare clinics and are, therefore, making inquiries to learn the cause of this decline and check it if possible. Two other problems are receiving special attention, that is the problem of rickets which is apparently more serious than we have thought and our nurses are also attacking the problem of infant diarrhoea. From the inquiries which will be started in co-operation with other nursing services in the City the clue to some effective method of procedure may be discovered. The studies we have referred to concerning rickets show that at least part of the cause of this disease is operative during prenatal life and that attention must be given to the diet of the mother.

The work of the health inspectors is growing steadily in scope, although the total number of inspections show less than other years, yet as pointed out in one of the paragraphs three months of the inspectors' time was given to assisting the **quarantine officer**. One of the newer duties is that of supervising the fumigation of buildings where hydrocyanic acid gas is used. Strict regulations have been issued by the Provincial Board of Health dealing with this method and our men are required to spend considerable time administering these regulations. The bath house continues to show the tremendous benefit that it is to the citizens, by increased number of baths and increased amount

of washing of clothing done by the bathers. There is also a very considerable increase in the number of scabies cases treated there. I think the time has come when we should give serious thought to pressing for the building of a health centre in some suitable location where we could house the Outdoor Clinic, the Victorian Order of Nurses, our own and other related services, the bath house with its various phases and a public comfort station. The present bath house is **very much better than nothing**, but is difficult of access, is **decidedly unattractive in appearance** and is operated at capacity.

In the inspection of the meat stuffs there is a steady decline in the amount of tuberculosis amongst the beef cattle and in the total amounts of meat condemned, which should not be taken as an indication of laxity, but rather that the butchers and farmers realize that satisfactory meat must be provided. I would also like to draw your attention to that section dealing with chief causes of condemnation. This is a new analysis and should prove of considerable interest as the years go on.

I think that the milk situation is quite well summarized insofar as dairy supervision is concerned, in the brief table showing percentage of average compliance. I am convinced that these improvements could not have been made under the ordinary penalty system of enforcement, but were made in anticipation of the adoption of the grading scheme that we proposed. The quality of the milk received at the pasteurizing plants also shows that the bacteriological quality is remaining at a high standard. In the laboratory report we find copies of the results of tests of milk as provided to the consumer. Seventy-five per cent of the samples show less than 15,000 bacteria per c.c. In addition to these counts we have begun to use the methylene blue reductase test on street samples as well and as you will see the percentage of those below our standard is small and has been reduced in the last year. Results of the sediment test which show the presence or absence of dirt have been reasonably satisfactory, although we feel that improvement could and must be made. **The butter fat remains well above the minimum standard.** Other samples **have been taken from various stages of production of ice cream and the like** for the purpose of checking the efficiency of our milk handling plants.

Yours respectfully,

R. B. JENKINS,
Medical Officer of Health.

EXPENDITURE

	1936	1935
Salaries	\$ 29,101.12	\$ 27,819.34
Supplies	1,313.56	1,319.90
Transportation	4,906.57	4,928.48
Sundries	572.71	531.22
Uniforms		185.00
	<u>\$ 35,893.96</u>	<u>\$ 34,483.94</u>

REVENUE

Inspection Fees	634.88	635.45
	<u>\$ 35,259.08</u>	<u>\$ 33,848.49</u>

DIVISION OF EXPENDITURE

	Adminis- tration	Communicable Disease	Milk Control	Laboratory Service	Food Inspection	Public Health Nursing	Sanitation	Vital Statistics	Total
Salaries	\$7,238	\$2,445	\$1,842	\$2,424	\$2,628	\$2,634	\$8,624	\$1,266	\$29,101.00
Supplies	342	630	40	124	14	10	94	59	1,313.00
Transportation	600	1,194	1,200	301	600	599	413		4,907.00
Sundries	268	83	19	43	78		82		573.00
	<u>\$8,448</u>	<u>\$4,352</u>	<u>\$3,101</u>	<u>\$2,892</u>	<u>\$3,320</u>	<u>\$3,243</u>	<u>\$9,213</u>	<u>\$1,325</u>	<u>\$35,894.00</u>
Per cent of total ..	23.54	12.12	8.64	8.05	9.26	9.03	25.67	3.69	100

SUMMARY OF STATISTICS

Area of City (including 1,000 acres of water) 26,778 and 2,147 acres
in Parks.

	1936	1935	1934	1933	1932
Population	85,696	81,621	79,773	79,231	78,387
Persons per acre of land	3.32	3.16	3.10	3.07	3.04
School enrolment	18,396	18,241	18,307	18,515	18,353
Natural increase of population	538	776	789	790	928
Cost per capita	0.42	0.39	0.42	0.42	0.45
Births, excluding stillbirths	1,432	1,394	1,383	1,375	1,561
Rate per 1,000 population	16.84	17.42	17.28	17.18	19.5
Stillbirths	50	23	37	29	52
Rate per 1,000 births	33.75	16.23	26.05	20.65	32.23
Deaths, excluding stillbirths	894	618	594	585	633
Rate per 1,000 population	8.16	7.7	7.42	7.31	7.91
Deaths under 1 year of age	63	56	70	82	69
Infant mortality rate per 1,000 living births	44.0	40.17	50.61	59.6	44.2
Deaths from childbirth	6	7	5	5	7
Maternal mortality per 1,000 births ..	4.18	5.02	3.6	3.6	4.47
Marriages	1,414	1,312	1,313	1,119	1,183
Rate per 1,000 population	16.63	16.40	16.4	14.1	15
Non-resident births in City	948	936	791	725	779
Non-resident deaths in City	443	402	325	310	314
Non-resident deaths under 1 year	33	36	34	34	42

VITAL STATISTICS

Births

There were 1,432 City births in 1936, 742 male and 690 female, an increase of 38 over 1935, when there were 1,394 births, 745 male and 649 female.

Born in institutions, 1,375 or 96% ; born at home, 57.

Attended by physician, 1,427; attended by Victorian Order of Nurses, 35 or 61.4% ; unattended, 5; double births, 15.

Maternal parentage:

	1936	1935
Canada	892 or 62.3%	805 or 57.5%
British Isles	242 or 16.9%	283 or 20.3%
Europe	186 or 13.0%	202 or 14.5%
U.S.A.	105 or 7.3%	102 or 7.3%
Other Countries	7 or .5%	2 or .2%
	1,432 or 100 %	1,394 or 100 %

Seventy-nine or 5.52% of the 1936 births and 82 or 5.88% of the 1935 births were illegitimate.

Stillbirths

Male, 27; female, 23; total, 50.

Born in hospital, 49; at home, 1; unattended, nil.

Causes of foetal deaths:

Dystocia, 15.

Prematurity, 14.

Malformation, 3.

Toxemia of mother, 4.

Other diseases or conditions of mother, 14.

Deaths

Male, 412; female, 282; total, 694; an increase of 76 over 1935, when there were—male, 361; female, 257; total, 618.

	1936	1935
Canada	341 or 49.1%	313 or 50.6%
British Isles	202 or 29.1%	165 or 26.7%
Europe	92 or 13.2%	99 or 16 %
U.S.A.	48 or 7.0%	33 or 5.4%
Other Countries	11 or 1.6%	8 or 1.3%

Deaths under 1 year of age—

Male, 30; female, 33; total, 63.

Infantile mortality rate per 1,000 living births, 44.0.

In 1935 there were—

Male 36; female, 20; total, 56.

Infantile mortality rate per 1,000 living births, 40.17.

Infant Mortality

Classifying the causes of deaths under one year of age from standpoint of preventability:

Class 1—Causes to a great extent non-controllable—premature birth (under 7 months), congenital debility, congenital malformation.

Class 2—Capable of reduction by hygiene, sanitation, isolation and treatment—tuberculosis, syphilis, acute respiratory diseases, acute infectious diseases.

Class 3—Capable of great reduction through care, proper feeding, pre-natal care—marasmus, acute gastroenteritis, injuries at birth, premature (over 7 months).

Of the 63 cases under one year of age:

Class 1—19 or 30%.

Class 2—17 or 27%.

Class 3—27 or 43%.

PRINCIPAL CAUSES OF DEATH FOR THE YEAR 1936

	MONTHS												1936			1935		
	January	February	March	April	May	June	July	August	September	October	November	December	Male	Female	Total	Percent of Total Deaths	Population	Rate per 100,000
90—95 Diseases of the heart	M																	
45—53 Cancer	F																	
163—196 External Causes	M																	
107—109 Pneumonia	F																	
11 Influenza	M																	
130—132 Nephritis	F																	
158—161 Early Infancy	M																	
82 Apoplexy	F																	
23—32 Tuberculosis	M																	
119—120 Diarrhoea	F																	
121 Appendicitis	M																	
157 Malformation	F																	
140—150 Puerperal State	M																	
Totals	M	16	20	24	27	20	22	21	17	19	16	18	37	18	275	6	7	8,775
Other Causes	F	19	13	20	17	17	18	18	20	10	11	17	8	206	48	69.3	56.6	421
	M	5	6	20	16	15	11	17	10	6	7	15	12	137	76	213	30.7	25
	F	7	4	11	14	7	6	4	3	2	4	6	8	76	173	29.1	216	
Total per month	M	21	26	44	43	35	33	28	27	25	23	25	50	412	282	694		
	F	26	17	31	31	24	22	21	17	14	17	25	8	282	694			
		47	43	85	74	59	57	50	48	47	37	42	77	38	694			

"X" Denotes outside deaths of Edmonton Citizens.

MORTALITY FROM CANCER (ALL FORMS) 1932 to 1936

Year	Total Deaths	Deaths from Cancer	Percentage of Total Deaths	Rate per 100M Population
1932	633	71	11.2	89
1933	585	82	14	102.5
1934	594	82	13.8	102.5
1935	618	87	14	108.75
1936	694	93	13.4	109.4

In the 1936 deaths from cancer, 50 were males and 43 females.

MORTALITY FROM HEART DISEASE (ALL FORMS) 1932 TO 1936

Year	Total Deaths	Deaths from Heart Disease	Percentage of Total Deaths	Rate per 100M Population
1932	633	92	14.5	115
1933	585	105	18	131.2
1934	594	112	18.8	140
1935	618	100	16.2	125
1936	694	119	17.2	140

For 1936 from heart disease, 71 were males and 48 females.

MORTALITY FROM TUBERCULOSIS (ALL FORMS) 1932 TO 1936

Year	Total Deaths	Deaths from Tuberculosis	Percentage of Total Deaths	Rate per 100M Population
1932	633	37	5.84	46
1933	585	26	4.44	32.5
1934	594	17	2.9	21
1935	618	27	4.4	33.75
1936	694	22	3.1	25.9

For 1936 from tuberculosis, 13 were males and 9 females.

EXTERNAL CAUSES OF DEATHS, 1932 TO 1936

Year	Total Deaths	Deaths from External Causes	Male	Female	Suicide	Homocide	Accidents	Percent of Total Deaths	Rate per 100M Population
1932	633	44	27	17	16	1	27	6.95	55
1933	585	32	22	10	5	1	26	5.47	40
1934	594	49	44	5	13	2	34	8.3	61
1935	618	39	27	12	10	1	28	6.3	50
1936	694	51	40	11	8	0	43	7.3	60

MATERNAL DEATHS

There were six deaths in this class, of which one was associated with stillbirth, one abortion and two no birth, leaving two associated with living births. The maternal death rate calculated in the usual manner of proportion of maternal deaths to the number of live births give a rate of 4.18 per thousand living births.

COMMUNICABLE DISEASE DEATHS

There were 10,082 cases of communicable disease reported during the year 1936, of which 4,793 were males and 5,289 were females, compared with 5,227 cases in 1935, of which 2,712 were males and 2,515 were females.

The morbidity rate per thousand of population was 118.6 for 1936, compared with 65.6 for 1935.

	1936		1935	
	Cases	Deaths	Cases	Deaths
Scarlet Fever	362	4	148	2
Rubella	5,384	1	10	0
Whooping Cough	1,243	10	190	0
Erysipelas	58	5	42	4
Pneumonia	0	15	6	19
Tuberculosis	68	22	79	27
Typhoid	20	4	0	0

Altogether infectious causes were responsible for 121, or 18.87% of the total of all deaths, 694.

ISOLATION HOSPITAL

Seven hundred and seventeen patients were admitted and 105 carried over from 1935, making a total of 822. There were 691 discharged; 54 died and 77 remained at the end of the year.

The diseases hospitalized include:

Scarlet Fever	327	Whooping Cough	42
Diphtheria	13	Smallpox	1
Erysipelas	74	Poliomyelitis	6
Tuberculosis	61	Typhoid Fever	19

and many complications of infectious conditions.

The deaths included:

Tuberculosis	11	Poliomyelitis	1
Scarlet Fever	5	Streptococcic throat and bronchial pneumonia	1
Erysipelas	7	Malignant bac. endocarditis	1
Erysipelas c. burns	1	Gas gangrene	1
Erysipelas c. carcinoma	1	Dermatitis arsenical poisoning	1
Meningitis	4	Pyelitis	1
Whooping Cough	6	Carcinoma	1
Whooping Cough c. Pneumonia	1	Apoplexy	1
Dysentery	1	Non-infectious (senile)	3
Influenza and Syphilis	1	Scarlet fever, measles and meningitis	1
Typhoid Fever	1		
Diphtheria	3		

IMMUNIZATION 1936

	Smallpox	Diphtheria	Diphtheria & Scarlet Fever	Scarlet Fever	Whooping Cough	Schick Test	Dick Test	Typhoid	Poliomyelitis
1936—Board of Health	6,755	184	528	493	485	15	780	135	
Public School Board		1,137		2,052					
R.C. Sep. Sch. Bd..	228	238							
	6,983	1,559	528	2,545	485	15	780	135	
1935—Board of Health—	112	185	599	123	122				93
Public School Board		1,163							48
R.C. Sep. Sch. Bd..	228	244							
	340	1,592	599	123	122				141

COMMUNICABLE DISEASES

	1936		1935		1934		1933		1932	
	C	D	C	D	C	D	C	D	C	D
Anterio poliomyelitis	3	1	34	2	.....	.....	3	.....	.....	.....
Cerebrospinal meningitis	1	.....	1	.....	1	.....	1	.....	2	.....
Diphtheria	6	1	7	1	3	.....	1	1	3	.....
Scarlet Fever	362	4	148	2	63	.....	58	.....	41	.....
Smallpox	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chickenpox	1286	1	994	.....	529	.....	589	.....	859	.....
Measles	1176	1	3105	1	32	.....	35	.....	3654	4
Mumps	123	.....	236	.....	554	.....	420	.....	491	.....
Rubella	5384	1	10	.....	4	.....	2	.....	3	.....
Whooping Cough	1243	10	190	.....	715	1	1326	5	306	.....
Actinomycosis .....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Dysentery .....	.....	.....	.....	.....	1	1	.....	.....	1	.....
Encephalitis Lethargica .....	.....	.....	1	.....	1	.....	.....	.....	.....	.....
Erysipelas	58	5	42	4	24	3	17	2	23	2
Ophthalmia-neonatorum	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pneumonia (Lobar) .....	.....	15	6	19	5	12	.....	10	5	15
Puerperal Septicaemia .....	.....	.....	.....	1	.....	.....	.....	.....	1	1
Septic Sore Throat	5	1	4	.....	2	.....	.....	.....	8	2
Trachoma .....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Tuberculosis (Pulmonary)	63	15	72	21	43	11	62	18	57	31
Tuberculosis (other forms)	5	7	7	6	6	6	7	8	7	6
Tularaemia .....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
Typhoid	21	4	3	2	1	.....	7	1	.....	.....
Typhoid Para .....	.....	.....	1	1	.....	.....	.....	.....	3	.....
Undulant Fever	1	.....	.....	.....	.....	.....	1	.....	.....	.....

Venereal Disease—

Chancroid .....	.....	.....	15	.....	24	.....	.....	.....	.....	.....
Gonorrhoea	252	.....	250	.....	277	.....	226	.....	.....	.....
Syphilis	91	11	102	8	78	5	94	5	.....	5
Totals	10082	78	5227	68	2363	39	2850	50	5464	66

Non-notifiable—

Diphtheria carriers .....	.....	.....	19	.....	.....	.....	.....	.....	.....	.....
Influenza .....	.....	36	.....	18	.....	13	.....	24	.....	39
Mycosis .....	.....	1	.....	.....	.....	.....	.....	1	.....	.....
Purulent Infection .....	.....	6	.....	4	.....	3	.....	2	.....	6
Trench Mouth .....	.....	.....	7	.....	4	.....	.....	.....	3	.....
Totals	10082	121	5253	90	2367	55	2850	77	5467	11

Total deaths, all causes	694	618	594	585	633
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Percent of total deaths due to communicable diseases.....	18.87	14.56	9.26	13.00	17.5
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Morbidity rate per 1,000 population	118.6	65.6	29.6	35.6	68.3
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C—Cases.

D—Deaths.

COMMUNICABLE DISEASE BY AGES AND SEX FOR 1936*

	Total	M	F	Under 1	1	2	3	4	5	6	14	15	25	44	45	59	60	69	70	Over
Poliomyelitis	3	2	1	1							2	1								
Deaths	1	1																		
Cerebrospinal Meningitis	1	1																		
Diphtheria	1	1																		
Deaths	6	2	4								3	2	1							
Euccephalitis Lethargica	1		1								1									
Deaths																				
Scarlet Fever	1	1																		
Deaths	362	192	170	1	5	17	29	27	29	207	35	12								
Smallpox	1	2									1	1								
Deaths	1	1																		
Chickenpox	1	1																		
Deaths	1286	634	652	41	46	75	74	68	85	816	64	16								
Measles	1	1																		
Deaths	1176	589	587	46	42	75	88	94	100	649	67	16								
Mumps	1	1																		
Deaths	123	56	67	1	2	4	3	7	19	64	16	7								
Rubella	5384	2382	3002	55	74	108	133	186	222	3548	816	223	18							
Deaths	1																			
Whooping Cough	1243	603	640	108	96	123	142	140	138	474	18	2								
Deaths	1																			
Erysipelas	58	31	27	5	3	2				2	5	18	21	2						
Deaths	1	1																		
Ophthalmia Neonatorum	1																			
Pneumonia (Lobar)	1																			
Deaths	15	12	3	2																
Septic Sore Throat	1	1																		
Deaths	1	1																		
Tuberculosis (Pulmonary)	62	29	34	1	1	2		1												
Deaths	15	11	4																	
Tuberculosis (other forms)	5	3	2			1														
Deaths	21	7	14																	
Typhoid Fever	21	7	14																	
Deaths	4	2	2																	
Undulant Fever	1	1																		
Veneral Diseases—																				
Gonorrhoea	252	204	48					1												
Syphilis	91	54	37																	
Deaths	11	10	1	2																
Non-notifiable—																				
Influenza																				
Deaths	36	20	16	2	1															
Mycosis																				
Deaths	1	1																		
Purulent Infection																				
Deaths	6	6																		
Total Cases	10082	4793	5289	254	267	405	470	523	593	5779	1178	510	83	29	17	16	22			
Deaths	121	80	41	12	5	2	1	1	1	6	9									
Pre-school Cases.																				
Deaths																				
School Age Cases.																				
Deaths																				
Adult Cases.																				
Deaths																				

5779 or 57.3 %
6 or 5. %1791 or 17.8 %
93 or 76.9 %2512 or 24.9 %
22 or 18.1 %

COMMUNICABLE DISEASE REPORT BY SEX AND SEASON FOR 1936

	Total	M	F	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Poliomyelitis.	8	2	1	1									2		
Deaths	1	1	1	1											
Cerebrospinal Meningitis	1	1	1												
Diphtheria	6	2	4			2							1		3
Deaths	1	1	1												1
Encephalitis Lethargica															
Deaths	1	1								1					
Scarlet Fever	362	192	170	70	67	54	25	17	11	4	16	20	21	24	33
Deaths	4	2	2			1								1	1
Smallpox	1	1													
Deaths	1286	634	652	170	46	17	19	20	32	47	49	65	123	340	358
Measles	1176	589	587	17	49	8	10	7	4	31	33	26	128	195	668
Deaths	1	1													
Mumps	123	56	67	41	19	9	12	13	12	3	3	4	4	2	1
Rubella	5384	2382	3002	5	198	861	1689	1880	633	74	9	9	6	10	10
Deaths	1	1													
Whooping Cough	1243	603	640	42	45	108	105	226	177	100	126	99	88	56	72
Deaths	10	6	4			2	2	2	2	4	7	4	2	4	3
Erysipelas	58	31	27	9		6	8	9	4	1					1
Deaths	5	4	1			1	2		1						
Ophthalmia Neonatorum	1	1													
Pneumonia (Lobar)															
Deaths	15	12	3		1	2	3			1	1	2		3	2
Septic Sore Throat	5	3	2		1	1			2		1				
Deaths	1	1													
Tuberculosis (Pulmonary)	63	29	34	4	7	2	3	14	8	5	2	6	6	3	3
Deaths	15	11	4	3		1	1	2	2	1	1	1	1	1	3
Tuberculosis (other forms)	8	2	6												
Deaths	7	3	4												
Typhoid Fever	21	7	14		1	1	8		2		4	4		2	1
Deaths	4	2	2			1					2			1	1
Undulant Fever	1	1													
Veneral Diseases—															
Gonorrhoea	252	204	48	28	14	17	22	17	22	19	19	17	30	25	22
Syphilis	91	54	37	5	7	9	13	7	6	5	7	9	10	7	6
Deaths	11	10	1	1	1	2				1	1	1	1	3	1
Non-notifiable—															
Influenza															
Deaths	36	20	16	1	3	11	10	5	1	2	1	1	1		
Mycosis															
Deaths	1	1				1									
Purulent Infection															
Deaths	6	6				2	1								
Total Cases	10082	4793	5289	893	453	1094	1915	2210	916	295	274	263	422	666	1181
Percent of Total		47.5	52.5	3.9	4.5	10.9	19	21.9	9.1	2.9	2.7	2.6	4.2	6.6	11.7
Total Deaths	121	80	41	6	8	23	19	9	7	9	9	5	8	9	13
Percent of Total		66.1	33.9	5.	6.6	19.1	15.7	7.4	5.8	7.4	8.2	4.1	2.5	7.4	10.8

"KINSMEN'S" TUBERCULOSIS NURSING SERVICE

Total visits made by nurse	2,889
Visits to positive cases	1,304
Visits to suspect cases	183
Visits to contacts	568
Number of contacts seen	2,422
Co-operative visits	662
Not at home, wrong address, etc.	172
New cases reported:	
Positives	82
Suspects	28
Contacts	206
Cases admitted to sanatorium	12
Cases admitted to local hospitals	80
Died, 19; deported, 1; arrested, 4; left Alberta, 3	27
Total cases on roll	513
Total city cases on roll	250
Persons examined	305
New examinations	150
Re-examinations	155
Number of visits to office	645
Letters written	282
Telephone calls	1,871

PUBLIC HEALTH NURSING

In presenting the report of the public health nursing services, the method used last year has been closely followed. Despite the fact that your nurses were deprived of the use of their car for nearly five months of the year due to the Rubella epidemic, it is felt that the work of this branch was well maintained. If, as has been said, the infant mortality rate constitutes one of the best guides to the state of public health in any area, then this year's rate of 43.99 per 1,000 living births speaks well although slightly higher than 1935, which was the low period for the last six years, and very well if compared with the rate for the whole province of 58 per 1,000 in 1935, the latest figure made available by the Provincial Department of Health.

CHILD WELFARE CLINICS

	1932	1933	1934	1935	1936
Number of Clinics held	102	102	102	92	100
Babies in attendance	4,556	4,431	4,066	3,306	3,686
Pre-school attendance	1,111	1,131	1,158	1,022	1,261
Total	5,667	5,562	5,224	4,328	4,947
Average	56.6	54.5	51.2	47.0	49.47
New cases admitted (babies)	787	792	779	714	808
New cases admitted (pre-school)	157	198	196	142	178
Babies referred to family doctor	64	50	63	46	35
Pre-school referred to family doctor	38	29	61	27	63

During the year your nurses strove hard to arrest the declining attendance at the Child Welfare Clinics held bi-weekly at the Civic Block with a certain measure of success as there was an increase in attendance of 619. This 619 was made up as follows:

380 babies and 239 pre-school children.

Dr. Calder, Dr. Folinsbee and Dr. Mildred Newell were in attendance to examine and advise parents regarding infant care and feeding.

WEIGHING CLINICS

	1933	1934	1935	1936
Total weighing clinics held	48	50	45	47
Total attendance of babies and pre-school children ...	774	743	615	485
Average	16.1	14.8	13.7	10.3

47 weighing clinics were held during the year. No new cases are admitted at these clinics as no doctors are in attendance. Parents are given advice by the nurses on duty on matters of routine care.

Attendance According to Age at Both Child Welfare and Weighing Clinics

	1934	1935	1936
Babies under 1 year	3407	2697	3152
Babies under 2 years	1118	948	898
	4525	3645	4050
Pre-school under 3 years	599	499	495
Pre-school under 4 years	344	309	352
Pre-school under 5 years	286	269	273
Pre-school under 6 years	169	162	204
Pre-school under 7 years	44	59	58
	1442	1298	1382
Total	5967	4943	5432

PRE-NATAL VISITS

	1932	1933	1934	1935	1936
City Nurses	376	279	291	388	318
V.O.N.	385	304	253	251	222
Total	761	583	544	639	540

During 1936 there were 186 new pre-natal cases added to our roll. These cases were made up as follows:

Referred by Provincial Outdoor Clinic	133
Referred by Red Cross	28
Referred by Private Cases	25
Total	186

The Junior Hospital League and Red Cross Society have more than kept up with their splendid records of past years in supplying layettes, etc., for needy families. To them and to all other organizations that have co-operated in such work our sincere thanks are herewith tendered.

INFANT MORTALITY, 1936
BY SEASON

BY AGE

	January	February	March	April	May	June	July	August	September	October	November	December	1st Day	1st Week	2nd Week	3rd Week	4th Week	Total under 1 Month	1-3 Months	4-6 Months	7-9 Months	10-12 Months
7 — Measles and Broncho Pneumonia.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9 — Whooping Cough.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11c — Influenza with Pneumonia.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34a — Congenital Syphilis.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
71b — Congenital Anaemia.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
79 — Meningitis.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
86 — Convulsions.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
89a — Otitis Media.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
107a — Broncho Pneumonia.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
108 — Lobar Pneumonia.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
119 — Enteritis and Diarrhoea.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
157a — Congenital Hydrocephalus.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
157b — Spina Bifida.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
157c — Congenital Malformation of Heart.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
157e — Congenital Malformation.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
158 — Congenital Debility.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
159 — Premature Birth.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
160b — Injury at Birth.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
151b — Icterus of the Newborn.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
161e — Diseases of Early Infancy.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	63	4	6	5	8	7	4	6	7	5	3	4	4	11	14	5	3	33	13	10	4	3

POST-NATAL VISITS

	1932	1933	1934	1935	1936
City Nurses	256	175	139	201	172
V.O.N.	723	404	448	646	620
Total	979	579	587	847	792

Visits classified as post-natal are those visits paid to homes during the first six weeks after the confinement.

All new mothers are encouraged to breast-feed their babies; to make periodic visits to the Welfare Clinic; and to report to the family physician for post-natal examination at the end of six weeks.

DISTRICT VISITS

	1932	1933	1934	1935	1936
Visits to homes	4228	3518	3481	3753	2508
Special investigations	140	102	65	64	94
Total	4368	3620	3546	3817	2602

Student nurses and Household Economics students of the University Hospital have put in many hours of duty doing district visiting in company with the Health Board's nurses.

DISABILITIES FOUND DURING DISTRICT VISITS, 1936

	Babies	Pre-School	School Age	Adults
I. Infectious and Parasitic Diseases	42	55	30	12
III. Rheumatic Diseases, Diseases of Nutrition and of Endocrine Glands and other general diseases	35	23	1	21
IV. Diseases of the Blood and Blood Forming Organs	1			2
VI. Diseases of the Nervous System and of the Organs of Special Sense	5	3	2	3
Diseases of Organs of Vision	4	5		
Diseases of Ear and of the Mastoid Process	14	4	1	
VII. Diseases of the Circulatory System	3	6	5	22
VIII. Diseases of the Respiratory System	21	25	4	23
IX. Diseases of the Digestive System	55	67	6	14
X. Diseases of the Genito Urinary System	9	5		2
XI. Diseases of Pregnancy				15
XII. Diseases of the Skin and Cellular Tissue	41	10	15	6
XIII. Diseases of the Bones and Organs of Locomotion	2	1	1	2
XIV. Congenital Malformation	3	1		
XV. Diseases of Early Infancy	13			
XVII. External Causes	4	2	1	2
XVIII. Not Specified				1

HEALTH INSPECTIONS

INSPECTIONS	1936	1935	1934
Complaints from the public	413	661	669
Complaints justified	295	458	452
Complaints unjustified	118	203	217
Notices, total	4,426	7,011	6,132
Written notices	1,232	2,255	1,235
Verbal notices	3,194	4,756	4,897
Inspections	10,868	19,789	19,103
Re-inspections	2,920	4,051	3,939

During the year 1936, 3 months, April, May and December, the health inspectors gave all their time to assisting the quarantine officer, thus accounting for the lower number of inspections, re-inspections, etc.

LICENSES

License applications received from bake shops, barber shops, bath houses, butcher shops, candy and ice cream parlors, dairies, dog kennels, laundries, entertainment halls, fish dealers, fur farm, hair dressing and manicuring, lodging houses, pool, billiard and dance halls, restaurants, vegetable and fruit wagons, etc., were investigated and reports turned over to License Inspector for action.

	1936	1935	1934
License applications investigated	1259	1344	1256

HOUSING

All rooming houses were regularly inspected. The general sanitation of these buildings has been well maintained.

	1936	1935	1934
Sewer and water notices issued	60	81	89
S. and W. installed, or house removed, etc.....	11	32	33
Extension of time granted	16	21	32
Statements to have plumbing installed by following spring	3	7	8
Nothing done	33	28	
Plumbing permits issued	149	157	183
Plumbing permits issued for old buildings.....	20	48	48 (inc.)
Buildings fumigated with HCN gas.....	79		

BATH HOUSE AND DISINFECTING STATION

Baths Given	28,551	22,875	17,224
Verminous	37	79	81
Clothing Disinfected	1,065	853	693
Scabies Cases	1,025	762	739
Men washing clothing	22,961	19,502	14,268
Units washed	67,048	58,506	42,804

SCAVENGING

Loads removed from North Side during Clean-up, 1936, 1,315.

Loads removed from South Side during Clean-up, 1936, 203.

COWSHEDS AND STABLE INSPECTION

Inspections in connection with this are included in the figures under the heading of Inspections.

	1936	1935	1934
Samples submitted to Provincial Laboratory	8	16	15
Foodstuffs condemned by Health Inspectors	2,745	2,720	3,323 lbs.
Rinse water samples taken.....	0	10	122
Beer glasses rinse water samples.....	0	13	0

WATER

	1936	1935	1934
Water samples taken.....	71	18	12
Ice samples	2	9	2

One of the reasons for the large number of samples taken during 1936 was the fact that several cases of Typhoid were reported, and samples were taken from all wells in these several districts.

INFECTIOUS AND CONTAGIOUS DISEASES

Assistance was given the Quarantine Officer during the busy season in quarantining and releasing homes from quarantine by the Health Inspectors. This was especially so in 1936, when April and May and also December were given up entirely to this work, to the detriment of the sanitation work, as all inspectors were called upon to assist.

Cases of Tuberculosis, Goitre, Trench Mouth, suspect Typhoid Fever, Typhoid Fever, Venereal Diseases, etc., were investigated by the Inspectors.

INDUSTRIAL HEALTH SERVICE

Many inspections were made of the business premises where help was employed. Ventilation and rest rooms received particular attention. Where improvements were needed orders were issued to that effect.

RELIEF

Considerable time was spent during the year in investigating appeals for relief which came under our notice.

We have to thank Mrs. Marshall, Journal Sunshine, and the ladies in the charge of the Blanket Fund and other charitable organizations for their help regarding bedding, clothing, etc.

ENFORCEMENT OF REGULATIONS

	1936	1935	1934
Prosecutions	0	5	3

The amendments to the Public Health Regulations calling for the disinfecting of second-hand material used in the manufacture of mattresses and the disinfecting of second-hand furniture that may be verminous is causing quite an increase in the work at the Disinfecting Station. The furniture dealers in the City are very glad to avail themselves of the opportunity to have second-hand furniture disinfested prior to putting it in stock.

It will, in my opinion, be necessary in the near future to provide more and better space for the bath room and disinfecting chambers.

FOOD INSPECTION

There have been four abattoirs under civic inspection during the past year. One was closed and inspection withdrawn for a period of about one month while the necessary repairs and alterations were effected. This brought the number which are fairly satisfactory to three.

Total number of animals slaughtered remains fairly constant, the decline in the number of hogs slaughtered has continued, due to the high price of live animals compared to that of other food animals.

This is the first report in which the percentage of animals affected with Tuberculosis are available, over a three-year period. It is interesting to note the decline in the number of cattle infected and also that the number of hogs affected remains remarkably constant.

MEATS INSPECTED AND CONDEMNED

Beef	1933	1934	1935	1936
Inspections	1,664	2,429	2,488	3,055
Carcasses condemned	7	14	15	11
Portions condemned	232	278	326	357
Weight (lbs.)	9,141	1,424	11,758	9,982
Veal				
Inspections	2,244	2,938	3,084	3,368
Carcasses condemned	2	10	7	8
Portions condemned	29	42	53	45
Weight (lbs.)	645	1,670	1,535	1,739
Mutton				
Inspections	1,868	2,168	2,643	2,102
Carcasses condemned	4	7	3	3
Portions condemned	99	134	206	203
Weight (lbs.)	500	722	670	672
Pork				
Inspections	5,288	2,763	2,651	2,113
Carcasses condemned	5	10	6	26
Portions condemned	1,546	858	891	551
Weight (lbs.)	18,909	11,641	11,918	10,936

Totals

Inspections	11,004	10,298	10,866	10,639
Carcasses condemned	18	41	31	48
Portions condemned	1,906	1,312	1,487	1,156
Weight (lbs.)	29,195	25,457	25,881	23,329

CARCASSES INSPECTED AND FOUND TO BE INFECTED WITH T.B.

Beef	1934	1935	1936
Inspections	2,429	2,488	3,055
Infected	29	17	15
Percent	1.15	.68	.45

Pork

Inspections	2,763	2,651	2,113
Infected	414	470	300
Percent	14.98	13.95	14.19

CHIEF CAUSES OF CONDEMNATION, 1936

Beef and Veal	Portions	Carcasses	Weight
Abscess multiple	104	.....	1213
Actinomycosis	148	.....	3092
Adhesions	105	.....	1352
Emaciation .....	.....	8	2380
Pneumonia .....	.....	3	725
Miscellaneous .....	.....	.....	2959

Mutton

Parasites	202	.....	421
Miscellaneous .....	.....	.....	251

Pork

Bruised	61	4	1625
Cripples	54	1	899
Parasites	56	.....	197
Tuberculosis	361	5	5160
Pneumonia .....	.....	8	1275
Miscellaneous .....	.....	.....	1780

FOODSTUFFS CONDEMNED

	1933	1934	1935	1936
Meat	21,195	25,457	25,881	23,329
Poultry	133 1/4	268 1/2	181	81
Sundries	509	181	1	0

Foodstuffs Condemned by Health Inspectors

Canned Goods	946	3,044 1/4	368 3/4	45 1/2
Meat	143 1/2	118	52	0
Poultry	95 1/2	5	5	10
Fish	3	20	250	332 1/2
Fruit & Vegetables	273	130 1/2	163	1,018 1/4
Candy	9	0	6 1/4	15
Biscuits	0	0	1,596	0
Cereal	0	0	150 1/2	0
Macaroni	0	0	80	0
Jam	0	0	0	768
Sauerkraut	0	0	0	360
Cheese	0	0	0	180
Ice Cream	57	0	0	0
Sundries	32	5 1/2	47 1/2	16 1/2

	23,396 1/4 lbs.	29,229 3/4 lbs.	28,782 lbs.	26,155 3/4 lbs.
Number of visits to butcher shops	4310	4598	4862	4784
Number of visits to other shops	913	1554	1644	2680

	5223	6152	6506	7464
Complaints received from public	33	19	35	17
Complaints justified	19	10	29	15

DAIRY INSPECTION

The rapid and great improvement shown in milk sanitation is probably without parallel in Canada, but the results compare favourably with those usually obtained in about 600 American cities and municipalities where a similar milk control method is in use. The grading scheme which was originated by the United States Public Health Service, Washington, D.C., has grown because of its excellence. There can be no better reason. By this method more improvement in milk sanitation and more nearly complete compliance with the requirements of a modern public health milk ordinance may be obtained in a few months time than by years of even the most conscientious effort under previous methods. The grading method appeals to the milk industry in general, certainly to a greater degree than any other type of milk ordinance known on this continent.

The improvement which has taken place in the average percentage of compliance with the milk regulations at about March 1st, 1936, is briefly shown herewith. For the purpose of elucidation, in this report the various branches of the milk industry are divided into the following classes:

- No. 1. Producer-distributors of unpasteurized milk.
- No. 2. Producers who ship unpasteurized milk to pasteurization plants.
- No. 3. Distributors of pasteurized milk (six pasteurization plants in number).

PERCENTAGE OF AVERAGE COMPLIANCE

- No. 1. Improved from 67.67 to 95.79.
- No. 2. Improved from 53.57 to 95.
- No. 3. Improved from 51.26 to 100.

Dairy barns have also been rebuilt or remodelled and a modern standardized type of two-room milk house erected at each farm. The milk house being provided with suitable equipment for the washing and sterilizing of dairy utensils and for the cooling and storage of milk. The new milk houses have done much to further the Edmonton clean milk campaign.

For several years, the bacteriological standard in Edmonton for raw milk shipped to milk plants for pasteurization has placed milk in the rejectable class where its reduction time has been less than 5½ hours under the reductase test.

The reductase tests were carried out according to the Standard Methods of Milk Analysis (A.P.H.A., 1934). A general test of the milk from all producers is carried out weekly throughout the year and wherever a sample of milk is found to be in Class 2 (reduction time less than 5½ hours) the producer is notified and a further test is made in three or four days time. Class 3 milk was eliminated during 1932 and Class 4 during 1931.

The following table shows the percentage of milk producers who shipped raw milk to pasteurization plants which milk was in Class 1 when received at the milk plants. Space does not permit the results of the weekly tests being given here and they are therefore, shown as a monthly average. It will be observed from the results in 1935-36 that the law of diminishing returns comes into play to a marked extent.

	1930	1931	1932	1933	1934	1935	1936
January		90.82	95.11	96.68	97.62	97.95	99.06
February	72.	90.55	95.10	97.84	96.97	98.38	99.76
March	75.5	91.51	95.67	97.08	98.38	98.92	99.41
April	77.5	87.21	96.75	96.76	96.97	98.27	98.60
May	65.	87.01	91.13	95.24	93.73	95.82	94.55
June	65.5	79.88	85.20	93.22	93.29	94.76	94.32
July	44.	77.20	97.21	92.64	92.64	95.27	94.32
August	64.	83.92	91.54	92.86	94.65	95.78	97.40
September	88.	92.18	95.38	97.73	98.16	98.71	97.77
October	91.5	97.19	97.95	98.38	99.14	98.46	98.28
November	88.	97.19	96.35	96.51	99.35	98.81	98.10
December	88.	91.33	97.	99.57	97.95	98.92	99.07
Average	74.4	88.84	94.53	96.04	96.57	97.50	97.55

10,806 reductase tests were carried out in 1935.

11,458 reductase tests were carried out in 1936.

177 shipments of milk were rejected for consumption in fluid form for 3 or 4 day periods during 1935.

176 similar shipments were rejected during 1936.

35 shipments of milk were rejected for consumption in fluid form for 3 or 4 day periods during 1935 on account of unsatisfactory sediment tests.

No milk was so rejected during 1936.

Inspections made: 1935, 935; 1936, 920.

Permits issued: 1935, 407; 1936, 377.

Average daily per capita consumption of milk, .676 imperial pints.
Percentage of milk pasteurized, 77.16.

LABORATORY REPORT

The following is a brief summary of some of the examinations made during the period covered by this report.

Milk Samples Taken

		Special	15,000 40,000	40,000 100,000	100,000 400,000	Over	Spreaders	Total
January	1935	74	23	6	2	....	1	106
	1936	71	16	8	1	....	2	98
February	1935	86	33	13	4	1	2	139
	1936	30	6	4	2	....	....	42
March	1935	99	23	3	3	....	2	130
	1936	96	26	7	3	1	2	135
April	1935	115	14	7	2	1	....	139
	1936	....	....	....	....	....	....	....
May	1935	64	5	4	1	....	1	75
	1936	37	8	4	3	2	1	55
June	1935	79	17	6	4	6	....	112
	1936	119	20	13	4	2	2	160
July	1935	101	14	14	3	2	....	134
	1936	90	19	14	3	....	5	131
August	1935	106	13	6	1	3	....	129
	1936	106	15	9	2	1	1	135
September	1935	79	19	10	5	1	....	114
	1936	118	13	8	1	1	4	145
October	1935	103	19	15	2	1	....	140
	1936	104	22	5	3	2	1	137
November	1935	97	23	9	3	....	3	135
	1936	97	22	9	3	1	....	132
December	1935	98	12	3	1	1	2	117
	1936	89	21	6	3	....	2	121
Totals	1935	1101	215	96	31	16	11	1470
	1936	957	189	87	28	10	20	1291
Percent	1935	75.5	14.7	6.6	2.1	1.1	....	100
	1936	75.3	14.9	6.8	2.2	.8	....	100

It will be noted that approximately 90% of all the retail samples gave bacteria counts of 40,000 or under for both years. Over 75% had counts of 15,000 and under. This is a particularly fine showing.

Methylene Blue Reductase test was also run on all of these samples.

Methylene Blue tests under 5½ hours—1935—30—2.03%.

Methylene Blue tests under 5½ hours—1936—21—1.6%.

Average mark for sediment test (possible 10)—1935—8.7.

Average mark for sediment test (possible 10)—1936—8.7.

In obtaining the butter fat average the results from several special high test milks such as the Jersey and 5% homo are included, thus raising the average slightly above that of the normal run of milk.

Average butter fat (1,460 samples).....1935 4.0%

Average butter fat (1,293 samples).....1936 3.9%

Average solids not fat (1,465 samples).....1935 8.84%

Average solids not fat (1,299 samples).....1936 8.82%

SPECIAL MILK AND CREAM SAMPLES**Milk**

Average butter fat (102 samples)—1935—4.1%.

Average butter fat (76 samples)—1936—4.1%.

1935—75 special bacteria samples were taken, 53 of these in special class.

1936—77 special bacteria samples were taken, 54 of these in special class.

Cream

Average butter fat (50 samples)—1935—22½%.

Average butter fat (46 samples)—1936—23½%.

1935—53 special bacteria samples were taken, 31 of these in special class.

1936—45 special bacteria samples were taken, 19 of these in special class.

Chocolate Milk

1935—48 samples taken, average butter fat—3.2%.

1936 71 samples taken, average butter fat—3.2%.

Ice Cream Samples

1935—19 samples taken, bacteria counts taken on these samples.

1936—20 samples taken, bacteria counts taken on these samples.

Swimming Pools

Supervision was given to the various swimming pools in town, both the city and privately owned. The test solutions were supplied for control of proper chlorination and determination of alkalinity. Tests were also made for copper which is used to prevent the growth of algae.